



Preparing For The Storm

Floodplain Management As The Foundation For Smart Growth

On Behalf Of:

The 2008 Massachusetts Smart Growth-Smart Energy Conference

December 12, 2008

Edward A. Thomas, Esq.

Baker

Land Use Regulations Are Local Within A State and Federal Context

**The Views Expressed Are Those of the Author
and Do not Necessarily Reflect Approval Of
Any Organization.**

- **This is Not Legal Advice – It is a Lecture on
General Principles of Law. For Legal Advice
see a Lawyer Licensed in Your Jurisdiction.**

To Set the Stage For Our Brief Discussion on Land Use-Sustainability-Liability and Water Resources

- **Lets Discuss Some Basics of Law**
- **In the Law-Especially Criminal Law Attorneys Often Seeks to Identify Someone Else to Take the Blame**
- **Often Called SODDI-Some Other Dude Did It**
- **On the TV show “The Practice” it Was Called “Plan B”**
- **The SODDI for Increased Flood Damages is Often...**

Mother Nature

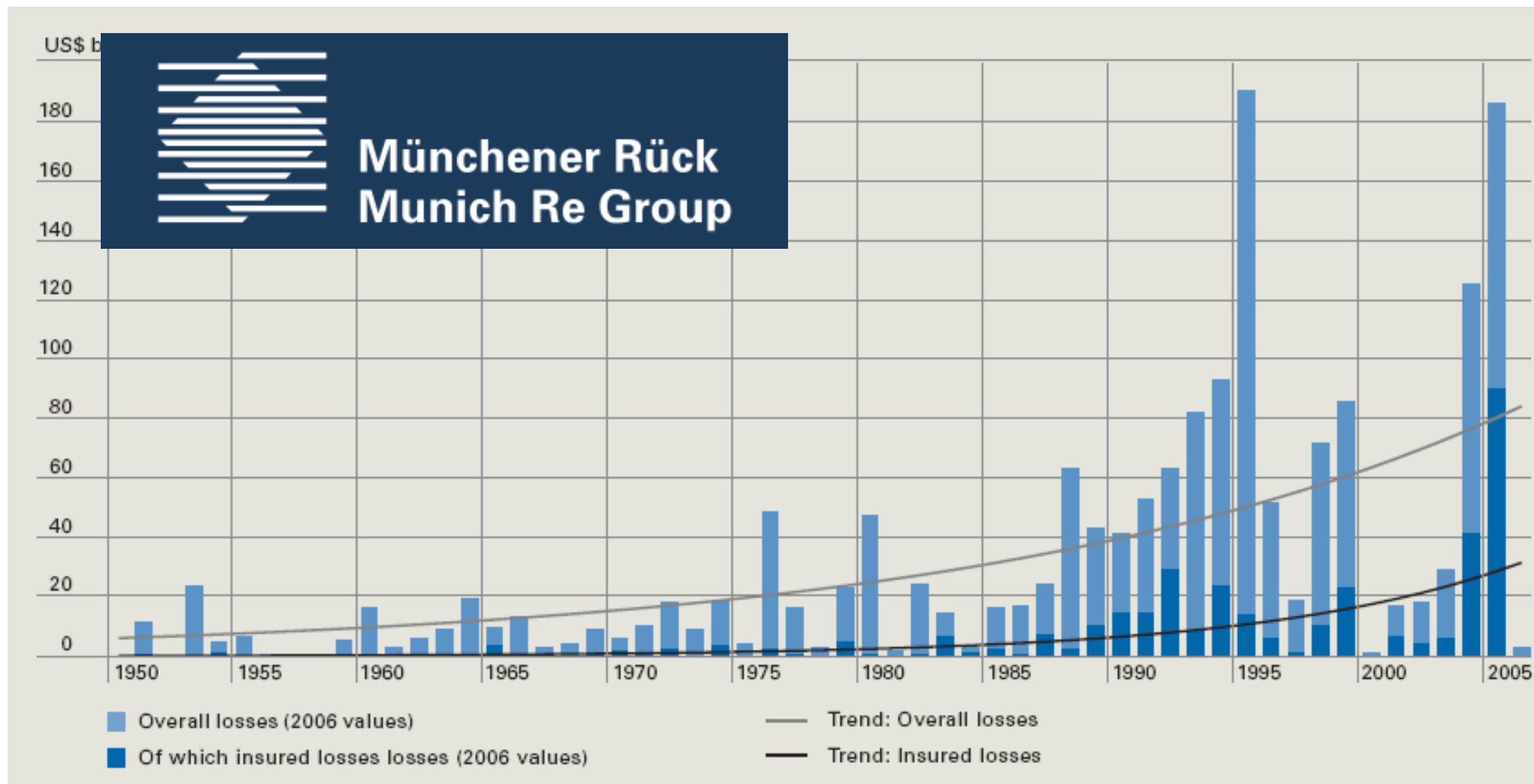


Baker Does Nature Cause Disasters?

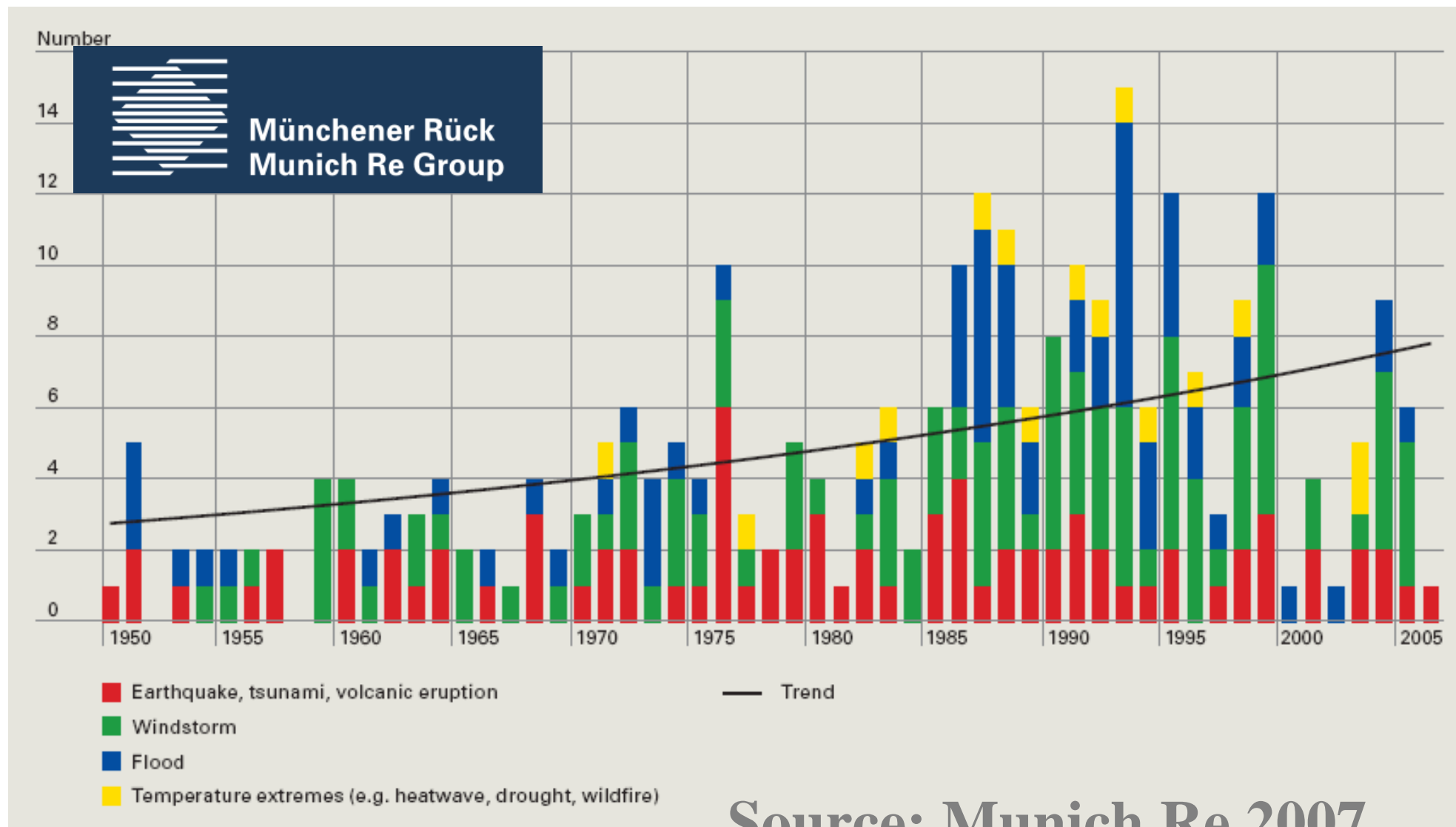
- **Some Folks Say: Global Warming Sea Level Rise- Causes Harm: Mother Nature is at Fault**
 - **Are Natural Disasters “Natural”?**
 - **Dr. Gilbert White Stated The Facts:**
 - **“Floods are Acts of Nature; But Flood Losses Are Largely Acts of Man”**
 - **Excellent Lecture by Dr. Roger Pielke Jr. at Natural Hazards Conference:**
- Cause of increased Flood Loss Is Changes in Density and Cost/Type of Buildings in Hazardous Areas**

Disaster Losses Have Been Increasing

Source: Munich Re 2007



Flood and Wind Disasters Have Been Increasing Most

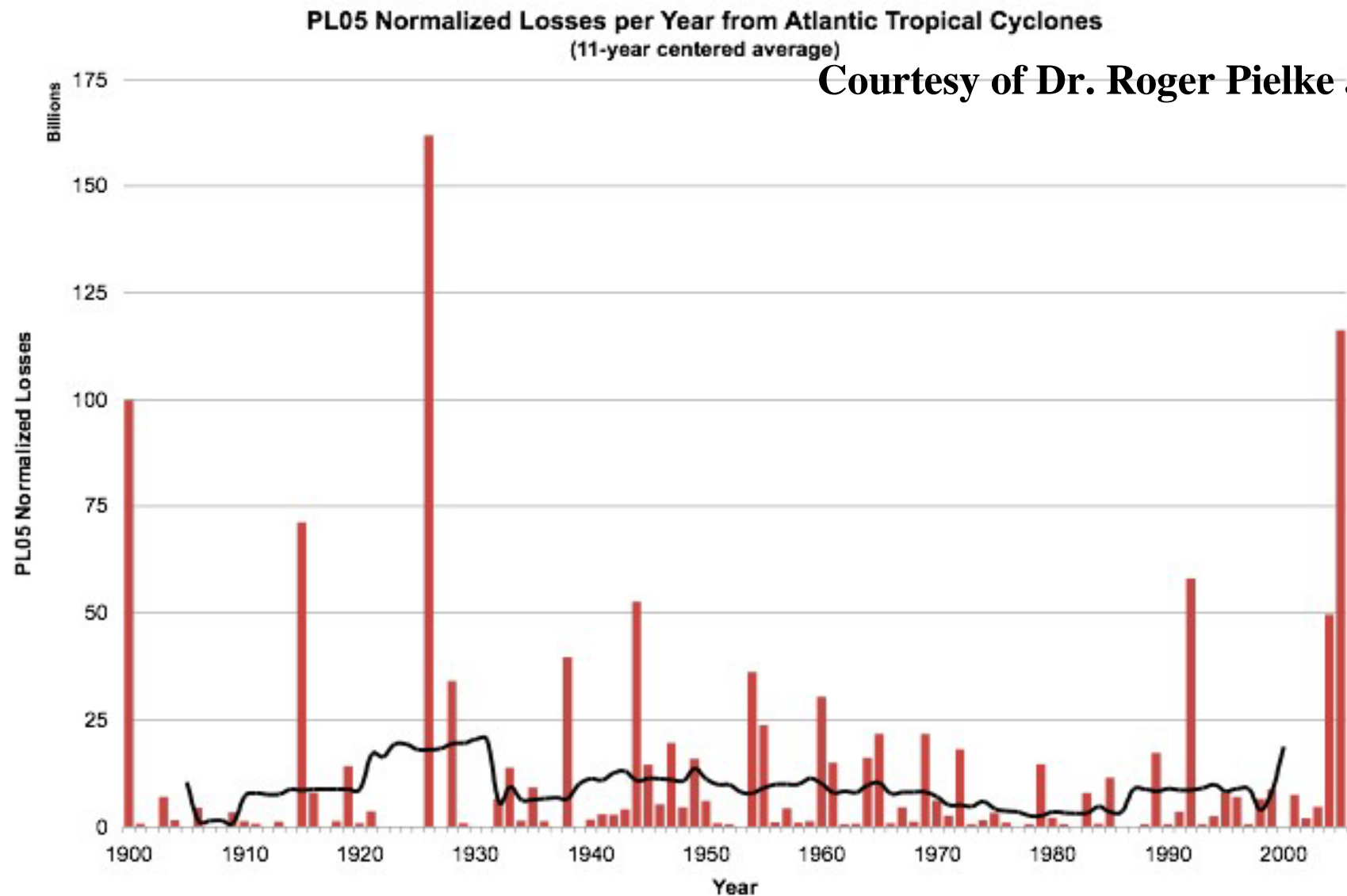


Source: Munich Re 2007

Courtesy of Dr. Roger Pielke Jr

REFORMATTED - Legal Issues

US Damage If Every Hurricane Season Occurred in 2005



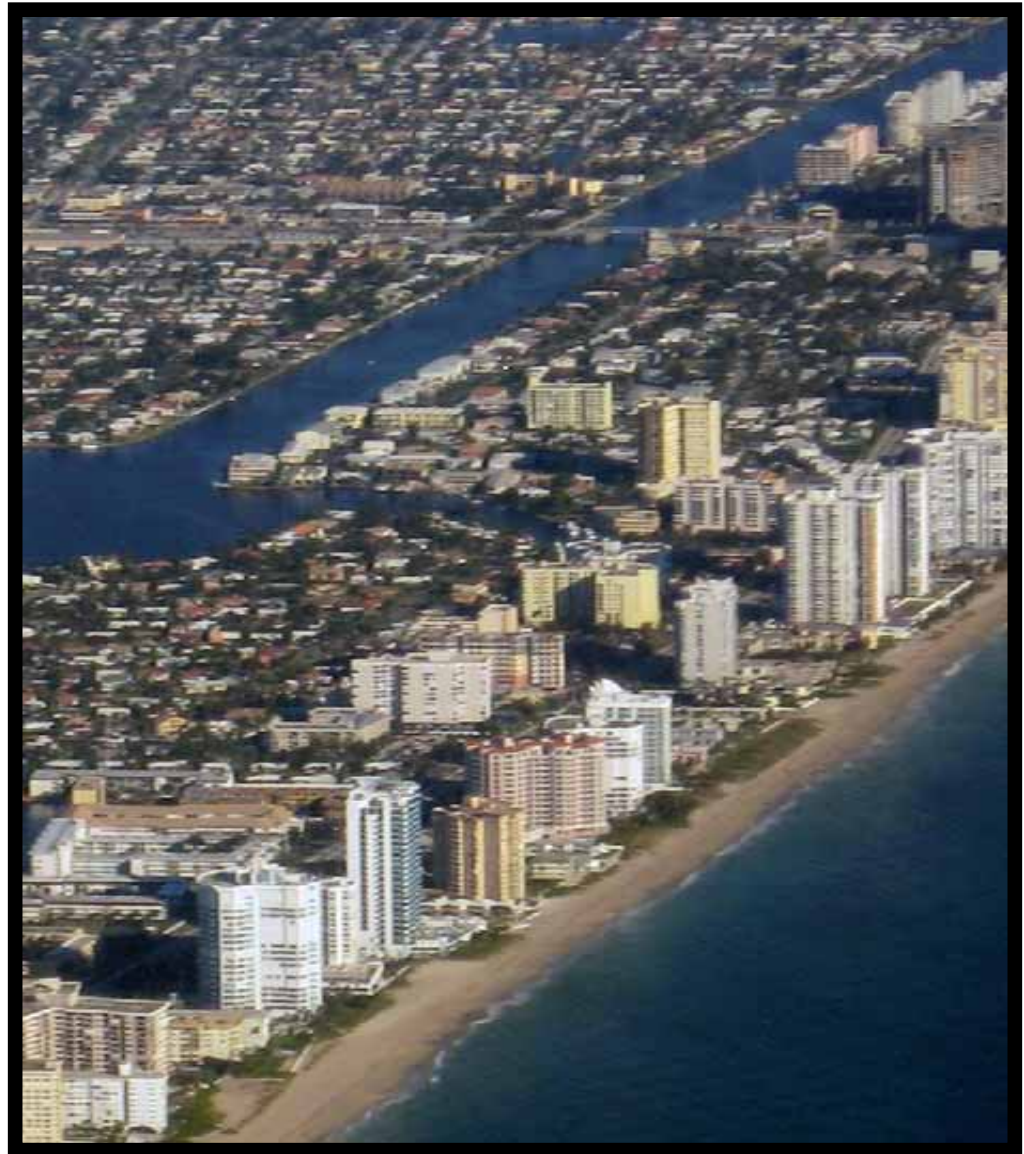
USA: Coastal Development

Miami Beach 2006

Miami Beach 1926



Wendler Collection



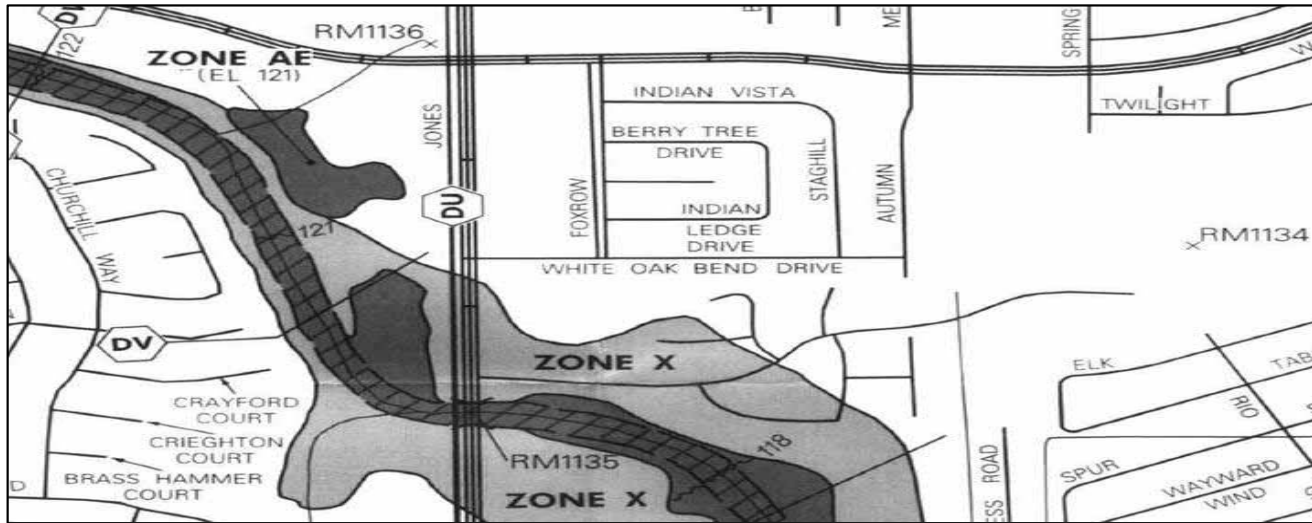
Joel Gratz © 2006

Central Message

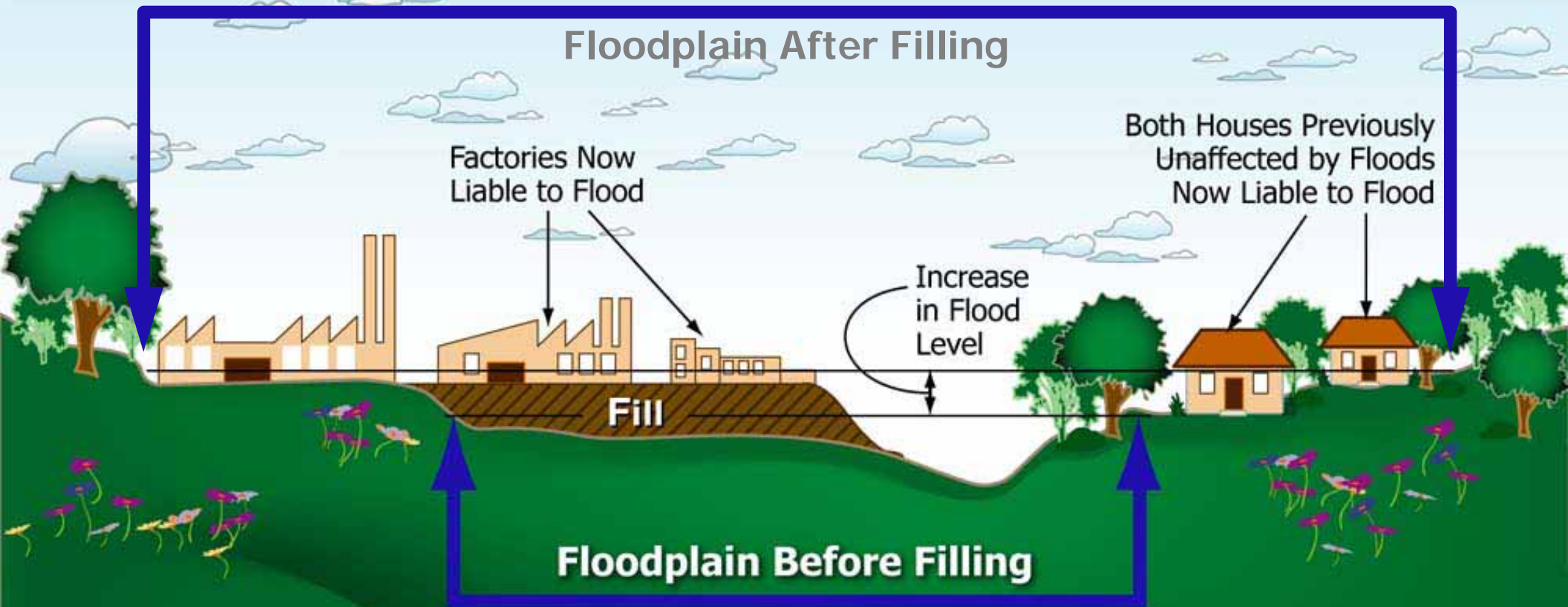
**Even If We Perfectly Implement
Current Minimum Standards,
Damages Will Increase.**

Remember, we have done a number of positive things,
both non-structural and structural, but...
We'll discuss why that is...

Where is the Floodplain?



Today's Floodplain Is Not Necessarily Tomorrow's Floodplain



**If large areas of the floodplain are filled, then there will be an increase in the land area needed to store flood waters.
This means your home or business may be impacted.**

With Full Build Out Flood Heights May Increase Dramatically

- **No Adverse Impact:**
 - **A New Direction in Floodplain Management Policy**
 - **Larry Larson PE, CFM and Doug Plasencia PE, CFM**
 - **Published in Natural Hazards Review Nov. 2001, IAAN 1527-6988**

What is A Watershed?

A watershed is an area of land that drains into a lake or river. As rainwater and melting snow run downhill, they carry sediment and other materials into our streams, lakes, and groundwater. The image below is a watershed illustration.



Watersheds provide water for drinking, irrigation, and streams. Many people also enjoy the lakes and streams for their beauty -- and for boating, fishing, and swimming. Healthy watersheds also provide food and shelter for wildlife.

Demographic Trends: The Future

- **As We Move Into the Next Generation Things Will Be Much More Challenging For Floodplain and Stormwater Managers**
- **Dr. Arthur “Chris” Nelson, FAICP**
- **Leadership in a New Era**
- **“More than half of the built environment of the United States we will see in 2025 did not exist in 2000”**

Journal of the American Planning Association,
Vol. 72, No. 4, Autumn 2006.

© American Planning Association, Chicago, IL.

**Flood Risk = P (Probability of flood) X
Consequences)**

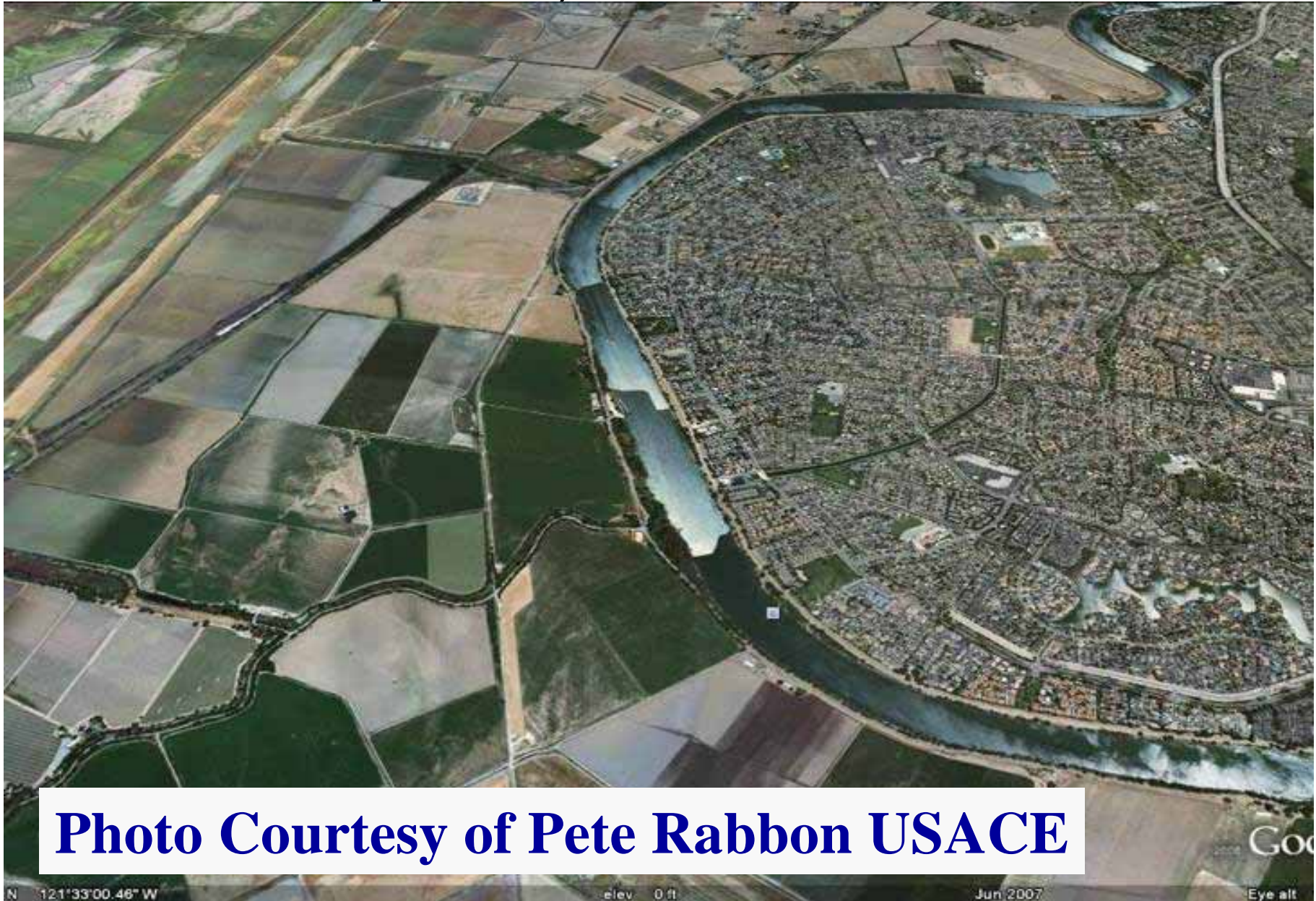


Photo Courtesy of Pete Rabbon USACE

A Solution

- **Go Beyond NFIP Minimum Standards**
 - **No Adverse Impact-Community Rating System**
Rewarded Type Watershed Management:
 - **Development Decision-making**
 - **Planning**
 - **Emergency Preparedness**

No Adverse Impact Floodplain Management

- What is No “Adverse Impact Floodplain Management”?
- ASFPM Defines it as “...an Approach that ensures the action of any property owner, public or private, *does not adversely impact the property and rights of others*”

Why Go Beyond the Current Minimum Standards?

Flood damages are rapidly increasing unnecessarily!

Current approaches deal primarily with how to build in a floodplain vs. how to minimize future damages

What Is The Result Of Following The No Adverse Impact Principle?

- **PROTECTION OF THE PROPERTY RIGHTS OF ALL**
- **Legally Speaking, Prevention of Harm is Treated Quite Differently Than Making the Community a Better Place.**
- **Prevention of Harm to the Public Is Accorded Enormous Deference by the Courts**

No Adverse Impact Floodplain Regulation

- **Consistent with the Concept of Sustainable Development**
- **Provides a Pragmatic Standard for Regulation**
- **Complements Good Water Quality, Wetland and Stormwater Regulation**
- **Makes Sense on a Local and Regional Basis**
- **May be Rewarded by FEMA's Community Rating System, Especially Under the New CRS Manual**

No Adverse Impact Floodplain Management

- **New Concept?**
- ***“Sic utere tuo ut alienum non laedas”***
- **Detailed Legal Paper by Jon Kusler and Ed Thomas available at: www.floods.org**
- **More Information in ASFPM**
- ***A Toolkit on Common Sense Floodplain Management* at: www.floods.org**



- **NO ADVERSE IMPACT AND THE COURTS: PROTECTING THE PROPERTY RIGHTS OF ALL**
- **Prepared for the Association of State Floodplain Managers**
- **By: Jon A. Kusler, Esq. and Edward A. Thomas, Esq.**
- **November 2007**



Question For The Group

- **Anyone Ever Hear Of Mohandas K. Gandhi?
He Was:**
 - A) One Of The Great Moralists of The Twentieth Century.**
 - B) A British Trained Attorney-At-Law.**
 - C) A Tremendous Influence On The Philosophy Which Guided Dr. Martin Luther King.**
 - D) All Of The Above.**

According To Gandhi's Writings

- ***"Sic Utere Tuo Ut Alienum Non Laedas"*** That Is, In English: **Use Your Property So You Do Not Harm Others Is:**
- **" A Grand Doctrine Of Life And The Basis Of (Loving Relationships) Between Neighbors"**
- **The Concept Of Using Property So It Does Not Harm Others Is Important To Discussion Of Dam And Levee Liability And Design.**
- **This Concept Will Also Help Us Understand How To Proceed In The Future, As We Shall See**

The Impediments To Proper Floodplain and Watershed Resources Management I

- **Externality**

The Problem of Externality

- **When One Group Pays Maintenance or Replacement of Something Yet Different Person or Group Uses That Same Something, We Often Have Problems**
- **Classic Example Is a Park Bench**
- **Disaster Assistance Is Another Classic Example of Externality**
- **Who Pays For Disaster Assistance?**
- **Who Benefits?**

Who Pays For Disaster Assistance?

- **Costs of flooding are usually largely borne by:**
 - a) **The Federal and Sometimes the State Taxpayer Through IRS Casualty Losses, SBA Loans, Disaster CDBG Funds, and the Whole Panoply of Federal and Private Disaster Relief Described in Ed Thomas's Publication "Patchwork Quilt (Located at: http://www.floods.org/PDF/Post_Disaster_Reconstruction_Patchwork_Quilt_ET.pdf)**
 - b) **By Disaster Victims Themselves**

Cui Bono? (Who Benefits?)

- **At Least the Short Term Benefits of Unwise or Improper Floodplain Development Flow to:**
 - a) **Developers (profit on sale and occupancy)**
 - b) **Local Governments (Real Estate and Sales Taxes-Jobs etc.)**
 - c) **State Government (Some Sales Tax-Jobs etc.)**
 - d) **Mortgage Companies (Profits On Loans etc.)**
 - e) **The Occupants of Floodplains Who May Benefit From a Lovely Place To Stay For a While, Anyway**

Why Should Government Do Something About This?

- **Fundamental Duty**
- **Protect The Present**
- **Preserve A Community's Future**

Baker Why Else Should Government Do Something About This?

- In a Word:

Liability

How Can You Best Avoid These Friendly Lawyer Folks?



Floods and Litigation

- **When Someone Is Damaged by the Actions of Others Who Pays?**
- **This is a Fundamental Question of Law.**

Three Ways to Support Reconstruction Following Disaster Damage

- 1. Self Help: Loans, Savings, Charity, Neighbors**
- 2. Insurance Disaster Relief: A Combination of Social Insurance and Self Help**
- 3. Litigation**

The preferred alternative is...

To have NO DAMAGE

Due to Land Use and Hazard Mitigation

Proof of Causation of Harm Is Easier Now Than In Past Times

- **Forensic Hydrologists**
- **Forensic Hydraulic Engineers**

Legal Issues: Professional Liability For Construction in Hazardous Areas

- **Excellent Paper By Jon Kusler, PhD, Esq. Is Now Available**
 - www.floods.org
 - www.floods.org/PDF/ASFPM_Professional_Liability_Construction.pdf
 - **Prepared For The Association Of State Floodplain Managers Foundation**

Flooded Homes May Cost City Millions City Held Liable – Damages Still To Be Determined



Photo: Lincoln Star Journal

- **Lawsuit seeks \$1 billion in Marin flood damage** The plaintiffs – 265 individuals and businesses – are each seeking \$4.25 million in damages
- **Lawyers representing the victims could collect more than \$66 million in fees**

Lawsuit seeks \$1 billion for Marin flood damage

Government agencies blamed for failing to prevent disaster

By Tad Whitaker

LJ reporter

Victims of last winter's devastating flood in Marin are seeking more than \$1 billion in damages from a laundry list of government agencies that they say share blame for the destruction.

The plaintiffs — 265 individuals and businesses — are each seeking \$4 million in damages and another \$250,000 in legal fees, according to lawyer Herb Rowland, who is defending San Anselmo. Lawyers representing the victims could collect more than \$66 million in fees.

The scope of the lawsuit, first filed last fall, and the cost to fight it have rankled some officials who believe the flood — which began on Dec. 31, 2005 — was the result of unique circumstances. The storm damaged about 1,200

LAWSUIT

The suit resulted from the Dec. 31, 2005, flood that damaged about 1,200 homes and 200 businesses in Marin.

PLAINTIFFS

A total of 265 residents and businesses.

DEFENDANTS

Those being sued include: San Anselmo, Mill Valley, Ross, Fairfax, Corte Madera, Larkspur, Marin County, the Marin Municipal Water District, the state of California, the Ross Valley Sanitary District, Tamalpais Union High School District and the Marin County Flood Control and Water Conservation District.

homes and 200 businesses.

Lawrence Mann, one of the attorneys representing the

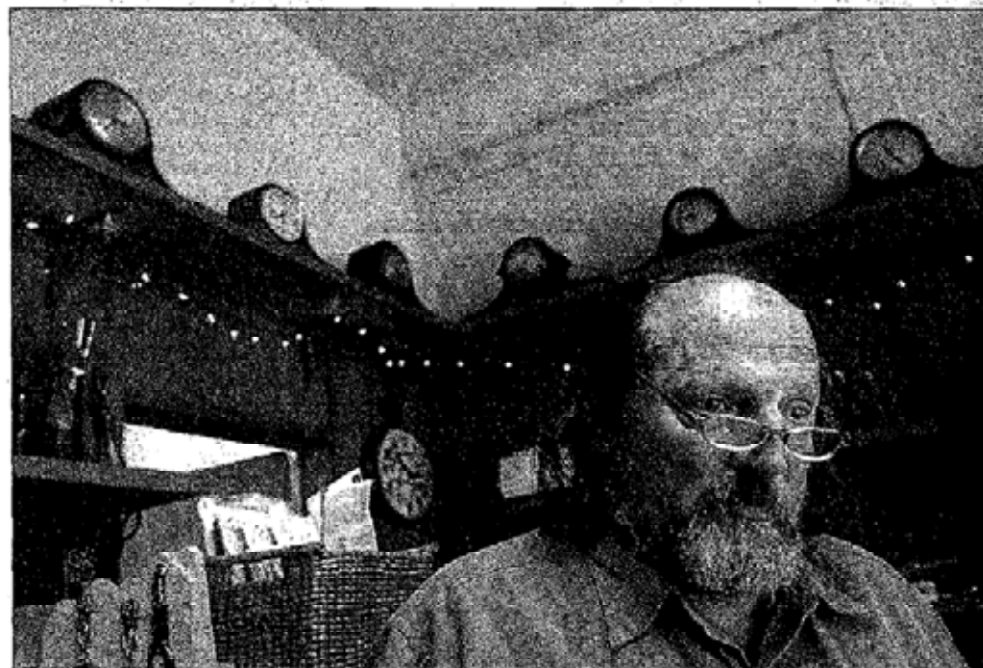
plaintiffs, said the goal is to win the maximum allowed by each entity's insurance policy so the settlement does not affect municipal budgets. Officials have estimated that total damage exceeded \$110 million, although Mann puts it above \$300 million. He said some of his clients have expressed interest in directing at least a portion of the proceeds toward flood solutions.

"Most people would like to see some of the money used to prevent flooding," he said.

Supervisor Hal Brown, whose district covers much of the flooded area, laughed when asked about people donating settlement money toward flood repairs.

"That to me isn't human nature," he said. "I think there are more positive directions to go in."

See Lawsuit, page A7



LJ photo/Alan

SUES: Drew McEachern of San Anselmo, owner of Antique Timepieces, is among those merchants joining a class-action lawsuit against numerous public agencies over the flood on Dec. 31, 2005. McEachern said "it's negligence" that the agencies didn't do enough to prevent a recurrence of the 1982 flood that also damaged his property.

City Of Half Moon Bay, California

November, 2007

- **City Liable for Nearly \$37,000,000 Under the Federal and State Takings Clauses, as Well as the Common Law Doctrines of Nuisance and Trespass, for Constructing a Storm Water Drainage System Which Flooded Someone**

Fernley, Nevada

- **“Class-action lawsuit updated in Fernley flood case”**
- **“The lawsuit names the Truckee-Carson Irrigation District, Lyon County, the city of Fernley, and companies that built and sold homes in the area flooded when a storm-swollen irrigation canal ruptured” Nevada Appeal, 1/26/08**

California Law Changes

1986 Sacramento River Flood

- 1 levee rupture**
- + 50,000 people evacuated**
- + 9,000 families left homeless**
- + 29 counties declared**
- + \$532 million in damages**
- + almost 2 decades of litigation**



Photographer: Geoff Fricker

= Paterno, A landmark court decision in 2003
Damages \$464 Million

Lawsuits Are Being Filed Following Hurricane Katrina

- **Defendants:**
 - A) Corps of Engineers;**
 - B) Local Levee Boards;**
 - C) Oil and Gas Companies;**
 - D) State Government, Public Officials (As Individuals); Construction Companies, Architects, or Design Firms; and Maintenance Entities.**
- **\$278 Billion In Claims For:**
 - A) loss of life;**
 - B) injury;**
 - C) insurable risks: commercial losses, property damage, business interruption, jobs lost, repair costs, disability claims; and**
 - D) virtually every type action allowed by our legal system.**

Katrina Legal Situation

- Katrina Lawsuits
- 500,000 Plaintiffs
- \$278 Billion in Damages Requested
- **Approximately 1,000 Plaintiffs Attorneys Involved-Learning About Levees, Floods, and Liability**
- A Copy of an Article on This Topic Appeared in the National Wetlands Newsletter and is available at:
www.floods.org/PDF/ET_Katrina_Insurance_082907.pdf
- For The First Time In Many Years, Lenders Will Lose Considerable Money on Mortgages in A Disaster Area

Irony A 'Plenty In The Katrina Litigation

- **The Folks Who Have Land Use Authority and Are Also Responsible For Many Of the Steps For Reducing Levee Residual Risk: Lawsuits Against Them Are Being Dismissed**
- **They Were Not Responsible For the Levees**
- **Just Responsible for Much of The Increase in Consequences**

Is That Fair?

- **John Fitzgerald Kennedy Offers Us Guidance on That Topic**
- **Most of You Know of JFK**

The Impediments To Proper Floodplain Management II

- **Concerns About A “Taking”**

The Constitution of the United States

- Fifth Amendment to the Constitution: “... *nor shall private property be taken for public use without just compensation.*”
- Was this Some Theoretical Thought, or Passing Fancy?
- Which Part of this Directly Mentions Regulation?
- *Pennsylvania Coal Company vs. Mahon* 260 US 293 (1922). But See, *Keystone Coal* 480 US 470, 1987.

Taking Lawsuit Results

- Regulations Clearly Based on Hazard Prevention and Fairly applied To All: Successfully Held to be a Taking – Almost None!
- Many, Many Cases where **Communities and Landowners Held Liable for Harming Others**

Examples of Situations Where Governments May Be Held Liable

- **Construction of a Road Blocks Drainage**
- **Stormwater System Increases Flows**
- **Structure Blocks Watercourse**
- **Bridge Without Adequate Opening**
- **Grading Land Increases Runoff**
- **Flood Control Structure Causes Damage**
- **Filling Wetland Causes Damage**
- **Issuing Permits for Development Which Causes Harm to a Third Party**

New Trend In The Law

- **Increasingly States Are Allowing Lawsuits Against Communities for Alleged Goofs in Permitting Construction OR in Conducting Inspections**
- **Excellent Paper By Attorney Jon Kusler PhD For The Association of State Floodplain Managers Foundation Available On Line at www.floods.org**

Recent Legal Research by Ed Thomas

- **Many Cases Where Communities Try to Prevent Building in a Hazardous Area**
- **Refuse the Requested Permit Based on Nebulous Environmental or Aesthetic Concerns**
- **And They Lose**
- **If they Clearly Related Permit Refusal to Harm Prevention-Very Likely a Different Result**

No Adverse Impact Hazard Regulation Is A Winning Concept

- **So How Do We Proceed?**
- **Planning**
- **Partnerships**
- **Planning**
- **Multi-Use Mapping and Engineering**
- **Planning**
- **Fair Regulation to Prevent Harm**

Can Government Adopt Higher Standards Than FEMA Minimums?

- FEMA Regulations Encourage Adoption of Higher Standards-“... **any floodplain** management regulations adopted by a State or a community which are **more restrictive** than (the FEMA Regulations) **are encouraged** and shall take precedence.” 44CFR section 60.1(d). (emphasis added)

Governmental Rights and Duties to Manage Development

- **Does Government Have a Right to Regulate to Prevent Harm?**
- **Does Government Have an Affirmative Duty to Regulate to Prevent Harm?**

Could One Argue That Higher-Coordinated Watershed Wide Water Resources Planning is **NEEDED** for our Nation?

■ Consider:

A) Uncertainties in Flood Elevations

B) Plasencia-Larson Paper On Flood Height Increases Due To Future Watershed Development

C) Consequences If Levee Is Overtopped

D) Height of Freeboard

E) 50% Chance That 1% Flood Will be Exceeded Within 70 Years – Bulletin 17 B

Legal Benefits of Harm Prevention as a Foundation of an Ordinance

Summary

- **No Adverse Impact Water Resources Management Is:**
 - A) Legal**
 - B) Equitable**
 - C) Practical**
 - D) Defensible in Court**

Hazard Based Regulation And The Constitution

- Hazard Based Regulation Generally Sustained Against Constitutional Challenges
- Goal of Protecting the Public Accorded **ENORMOUS DEFERENCE** by the Courts

Avoiding A Taking

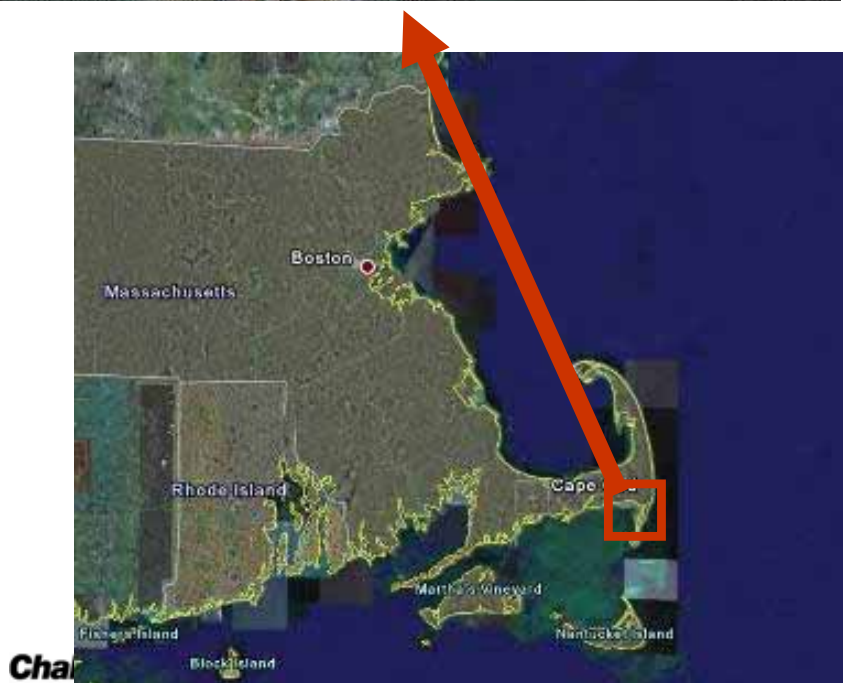
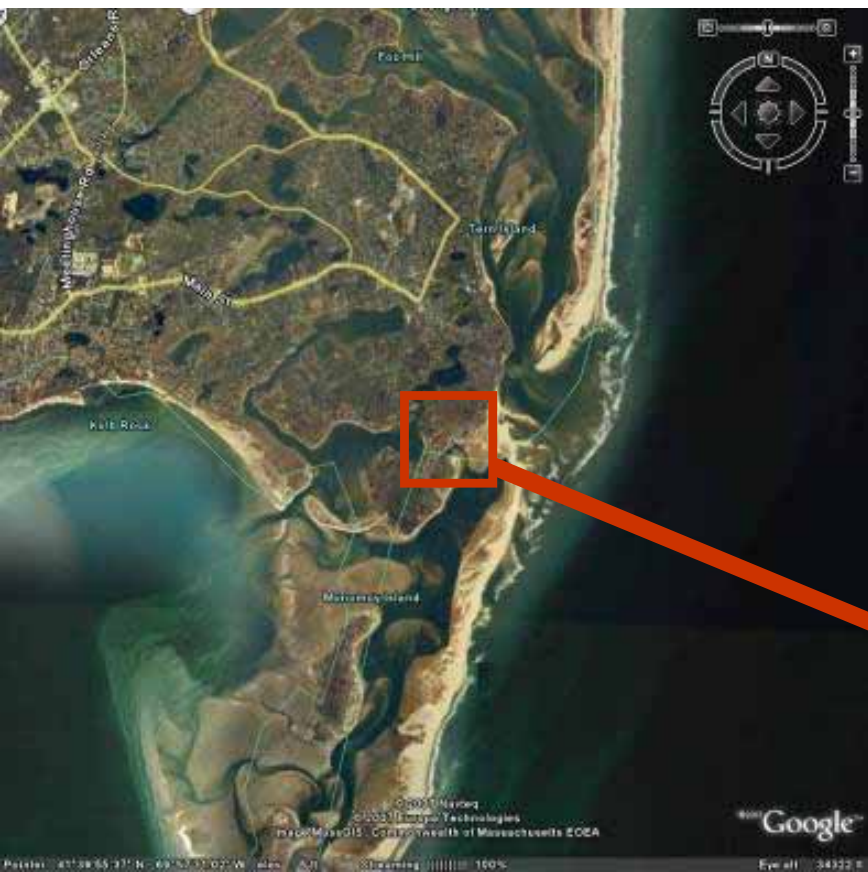
- Avoid Interfering with the Owners Right to **Exclude** Others. (Loretto)
- Avoid Denial of All Economic Use. (Lucas)
- In Highly Regulated Areas Consider **Transferable Development Rights** or Similar Residual Right so the Land Has Appropriate Value. (Penn Central)
- **Clearly Relate Regulation to Preventing a Hazard**. See, Different results in *Gove v. Zoning Board of Appeals*, 444 Mass.754 (2005) and *Annicelli v. Town of South Kingston*, 463 A.d 133 (1983); and *Lopes v. Peabody*.
- Further Details on Massachusetts Coastal Zone Management's StormSmart Coasts web-site: <http://www.mass.gov/czm/stormsmart/>
- Establish a Fair Variance Procedure

What NAI looks like:

Gove v. Zoning Board of Appeals

444 Mass.754 (2005) Massachusetts
Supreme Judicial Court, decided July
26, 2005

The Gove site



“It is undisputed that [lot 93] falls within a floodplain, and that its potential flooding would adversely affect the surrounding areas if the property were developed with a house. Reasonable government action mitigating such harm . . . typically does not require compensation.”



Why Chatham won:

- Bylaw designed to protect people & property
- Allows for alternative uses
- Bylaw fair & consistently applied
- Testimony of risk to emergency workers
- Town willing to defend itself

Implementing NAI in the Real World- I

- **Comprehensive Watershed Future Conditions Water Resources Mapping Looking At Water Supply-Water Quality-Stormwater Management And Flooding.**
- **Interim Measure**
 - **Require A Demonstration That All Development Does Not Change The Hydrograph For The 1-10-50-100-500 Year BOTH Flood And Storm**
- **If Time Permitted We Would Have Some Engineers Discuss Exactly How To do These Steps: Low Impact Development**

Implementing NAI in the Real World- II

- **Follow the Lead Of Municipalities Like Chatham, Massachusetts**
- **Consider Life Safety In Permits In Potentially Hazardous Areas**
- **See The Handouts Developed By MA CZM**

- **Is NAI a Silver Bullet?**
- **Use of NAI Will Significantly Reduce the Probability of a Loss in Court!**
- **Even Better Odds if there is A Good, Fair Variance Procedure + Flexibility in the Regulation + Community Applies the Principle to their Own Activities.**

Take Away Messages For Today

Prevention

- **We Throw Money At Problems After They Occur**
- **You Can Pay A Little Now Or Lots Later**
- **The Legal System Is Ready To Help You Pay Later**

Take Away Message

- **Responsible For Community Development?**
 - **Many Areas Can Flood**
 - **Uninsured Victims Will Likely Sue-If They Can Find Someone to Blame**
 - **Fair Harm Prevention Regulation Helps Everyone**

Message For All Involved In Community Development

- **The Fundamental Rules of Development
Articulated, By Federal Law, Envision Housing
and Development Which Is:**
 - **Decent**
 - **Safe**
 - **Sanitary**
 - **Affordable**

Flooded Development Fails That Vision!

- **Housing And Development Which Flood Are:**
 - **Indecent**
 - **Unsafe**
 - **Unsanitary**
 - **Unaffordable- by the Flood Victims, By Their Community, By The State, and By Our Nation!**



Preparing For The Storm

Floodplain Management As The Foundation For Smart Growth

On Behalf Of:

The 2008 Massachusetts Smart Growth-Smart Energy Conference

December 12, 2008

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